



Recombinant Protein Technical Manual
Recombinant Human ITPase/ITPA Protein (His Tag)
RPES1445

Product Data:

Product SKU: RPES1445

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: Q9BY32

Protein Information:

Molecular Mass: 22.5 kDa

AP Molecular Mass: 21 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, pH 8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Inosine Triphosphate Pyrophosphatase; ITPase; Inosine Triphosphatase; Non-Canonical Purine NTP Pyrophosphatase; Non-Standard Purine NTP Pyrophosphatase; Nucleoside-Triphosphate Diphosphatase; Nucleoside-Triphosphate Pyrophosphatase; NTPase; Putative Oncogene Protein hlc14-06-p; ITPA; C20orf37

Immunogen Information:

Sequence: Ala2-Ala194

Background:

Inosine Triphosphate Pyrophosphatase (ITPase) is a cytoplasmic enzyme that belongs to the HAM1 NTPase family. ITPase hydrolyzes the non-canonical purine nucleotides inosine triphosphate (ITP) and deoxyinosine triphosphate (dITP) to the monophosphate nucleotide (IMP) and diphosphate. The ITPase enzyme acts as a homodimer and does not distinguish between the deoxy- and ribose forms. ITPase probably excludes non-canonical purines from RNA and DNA precursor pools, thus preventing their incorporation into RNA and DNA and avoiding chromosomal lesions. Defects in ITPase is thought to be inherited and is characterized by an over-accumulation of ITP in erythrocytes, leukocytes and fibroblasts.